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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,461	03/14/2006	Michael Charles Richard Bartlett	13058N/041750	2845
32885	7590	05/16/2008		
STITES & HARBISON PLLC 401 COMMERCE STREET SUITE 800 NASHVILLE, TN 37219			EXAMINER SUHOL, DMITRY	
			ART UNIT 3725	PAPER NUMBER
			MAIL DATE 05/16/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/511,461	<b>Applicant(s)</b> BARTLETT ET AL.
	<b>Examiner</b> Dmitry Suhol	<b>Art Unit</b> 3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 01 February 2008.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 30-58 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) 56-58 is/are allowed.  
 6) Claim(s) 30-52 is/are rejected.  
 7) Claim(s) 53-55 is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-1668)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 30-33, 42-44, 46-49, 51 are rejected under 35 U.S.C. 102(b) as being anticipated by Pawlik et al (WO 01/88452). Pawlik discloses an arrangement for cooling a roll containing all the claim elements including, a hollow shaft (5 and 11) mounted to a rotatable housing and a cooling medium line (13) having an inlet and outlet (14) communicating with an elbow portion (elbow inlet shown in figure 2) with a first length being substantially perpendicular to the axis of the shaft and the second length extending from the first length in the direction of the shaft (see figure 4 with respect to the elbow and its respective portions attached to member 13). A sealed distal end is shown in figure 1 at end where outlet 14 is clearly closer to the end than the inlet of member 13 as shown in figures 1 and 2. Distal end being sealed at 19 as required by claim 14 is shown in figure 1. A second medium cooling line, as required by claim 32, is shown in figure 2 as line 9.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 34-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlak '452 in view of Tim '135 or Ives '207. Tim is relied upon to teach that it is known to manufacture a rotary joint heat exchange device such that an annular flange connection is utilized to secure an elbow (108) and a shaft member (52). Ives also teaches a connection like that of Tim (figures 1 and 2). Therefore it would have been obvious to one having ordinary skill in the art, at the time of the claimed invention, to have provide an annular connection between the elbow portion and member 11 of Pawlak for providing a strong, durable and detachable connection between the two.

Claims 36-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlak '452 in view of Jarrett (GB 2046386). Jarrett is relied upon to teach that it is known to manufacture an arrangement for cooling a roll where the elbow portion (6) comprises internal and external threads (7,8) in order to provide an attachment means (figure 1). Therefore it would have been obvious to use a threaded connection between the shaft (5) and member (13) of Pawlak for the purpose of providing a water tight and sturdy connection since such a combination would yield predictable results. Ridges as required by claim 41 are read onto threads as shown. A spacer as required by claim 45

is read onto o-ring (14) and would have been obvious to include in Pawlak for the purpose of providing a tight seal.

Regarding claims 37 and 40 it would have been obvious to include an internal and external connection means in the first and second lengths of the Pawlak elbow for the purpose of flexibility of connection (i.e. attachment to a pipe member having either an internal or external connection or differently sized piping), since the examiner takes official notice that providing an internal and an external thread on a pipe coupling is well known in the art.

Claims 50 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pawlak '452. Absent any disclosure of criticality, advantage or solution to a given problem it is considered that the tapering of the shaft as claimed is a design choice and does not patentably distinguish over the prior art. With respect to the outlet channel being threaded, such construction would have been obvious for the purpose of providing a discharge pipe attachment to the device as such construction is well known in the art (official notice taken).

#### ***Allowable Subject Matter***

Claims 53-55 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 56-58 are allowed.

***Response to Arguments***

Applicant's arguments filed 2/1/08 have been fully considered but they are not persuasive. It is argued by the applicants that the prior art reference of Pawlak functions differently than applicants invention. In response the examiner points out that Pawlak anticipates or obviates all claimed limitations as interpreted and stated above and therefore the rejection is made Final.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Suhol whose telephone number is 571-272-4430. The examiner can normally be reached on Mon - Friday 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dmitry Suhol/  
Primary Examiner, Art Unit 3725

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